

5. Isabella

Program Name: Isabella.java

Input File: isabella.dat

Isabella is a banker at an international bank. It's the end of her workday and she is checking all the ledgers to make sure that all the accounting from the day is in agreement. However, because her work is international, so she has to deal with currency from all over the world, which means that the ledger she is checking against can be in any of the currencies of which she does business.

Luckily, Isabella is only dealing with deposits, which means she only has to verify the ledgers of the deposits. Every day she does get the latest conversion rates for all the different currencies. Since this is the world of banking, decimal points are important, so she must be sure to not lose any precision. Please help her ensure that her ledger is a good and matches the ledger she is checking against.

Each set of conversion data is of the form:

Currency1 Currency2 rate

which means that 1 unit of Currency1 is equal to the rate value of Currency2.

For example, **USD COP 2960.843** means that 1 USD is equal to 2960.843 COP.

Input: The first integer is the number of conversion currency rates she has to deal with in one day. Each line of the conversion data will be two 3-letter currency abbreviations, followed by a rate, in the form shown above. All currency conversions will be given, so she never has to try and calculate what a conversion should be for a country. The next line will be an integer representing the number of data sets to follow. The first integer of each data set will be the number of lines in Isabella's ledger that she needs to check. The last line of each data set will be the value from the ledger that she is checking against.

Output: The output will be either "**GOOD LEDGER**", if the ledger she is checking against matches the sum in her ledger or "**BAD LEDGER**", if the ledger she is checking against has a different value than the sum of her ledger.

Sample input:

6	1000 USD
MXN ISK 10	1000 MXN
MXN USD 0.00000000000005	1000 ISK
ISK MXN 0.1	1000 ISK
ISK USD 0.00000000000005	1000 ISK
USD MXN 2000000000000	1000 ISK
USD ISK 20000000000000	1000 MXN
3	1000 USD
3	1000 USD
1000 USD	1000 USD
6890 MXN	80000000000024000 ISK
43.3 ISK	
2000000000006894.33 MXN	
1	
1.0 USD	
0.0 ISK	
10	

Sample output:

GOOD LEDGER
BAD LEDGER
GOOD LEDGER